ABSTRACT OF THE DISCLOSURE

5   A method and mechanism for reducing data transfer latency. A request for transfer of a block of data is received. In addition, a mask is received which indicates only particular sub-blocks of the block are required. Access to the blocks are made from an interface to a control unit which is configured to transfer data in sub-block units. Each request to the control unit includes an address corresponding to a particular sub-block. In

10   response to receiving a transfer request corresponding to a block of data, the interface is configured to concurrently generate an address corresponding to each sub-block of the block, detect which of the sub-blocks are required as part of said transfer request, and utilize only those generated addresses which correspond to the sub-blocks which are required to generate requests to the control unit. In addition, the interface is configured to

15   determine how many sub-blocks are required by examining the received mask. In response to receiving the required number of sub-blocks from the control unit, the interface detects all required data has been received and no further requests to the control unit are required.